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09/768,671	01/24/2001	Qiaofeng Zhou	376548004US	3902

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EXAMINER	
LEE, PHILIP C	

ART UNIT	PAPER NUMBER
2154	7

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/768,671	ZHOU, QIAOFENG	
	Examiner	Art Unit	
	Philip C Lee	2154	

-- The MAILING DATE of this communication appears on th cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 May 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-41 are presented for examination.

2. It is noted that although the present application does contain line numbers in the specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.

Claim Rejections – 35 USC 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 6-7, 11-12, 16-18, 21, 24, 25-28, 29, 30, 34-36 and 40-41are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman et al, U.S. Patent 6,415,329 (hereinafter Gelman) in view of "Official Notice".

5. As per claim 1, 12, 24, 27, 29, 30, 34-36 and 40-41, Gelman taught the invention substantially as claimed in a computer system acting as a host of multiple virtual computer systems for communicating with remote computer systems on behalf of the virtual computer systems (fig. 9A; col. 15, lines 28-31), remote and host computer systems each having a unique network address (fig. 14), the communicating on behalf of a virtual computer system performed by using the virtual computer system network address in place of the host computer system network address (fig. 2; col. 10, lines 9-21), the method comprising:

communicating with a remote computer system on behalf of the host computer system (col. 28, lines 48-52)by

creating a first communication socket on the host computer system whose destination is the network address of the remote computer system (col. 28, lines 64-col. 29, lines 15; col. 29, lines 46-53);

during establishment of a connection with the remote computer system using the first communication socket, responding to a query for a source network address for the first communication socket by determining and providing the network address of the host computer system (col. 10, lines 9-13); and

sending a message to the remote computer system from the host computer system by using the first communication socket, the sent message including the source network address of the host computer system (col. 10, lines 9-13; col. 29, lines 54-65); and

for each of multiple of the virtual computer systems, communicating with a remote computer system on behalf of that virtual computer system (fig. 14; col. 28, lines 48-57) by

determining that a message is to be sent from that virtual computer system to the remote computer system(col. 29, lines 16-25; col. 9, lines 66-67; col. 16, lines 35-45);

creating a communication socket on the host computer system whose destination is the network address of the remote computer system (col. 9, lines 1-2; col. 10, lines 14-16; col. 16, lines 53-55; col. 29, lines 34-53);

before using the created communication socket to establish a connection with the remote computer system, binding the network address of that virtual computer system to be a source of the created communication socket (col. 9, lines 1-2; col. 10, lines 14-16; col. 16, lines 63-64; col. 29, lines 46-65); and

sending a message to the remote computer system from the host computer system on behalf of that virtual computer system by using the created communication socket, the sent message including the bound source network address of the virtual computer system (col. 9, lines 1-2; col. 10, lines 9-12; col. 16, lines 63-col. 17, lines 4; col. 29, lines 60-col. 30, lines 36.),

so that the remote computer system receives communication over the host computer system communication socket as if the host computer system were that virtual computer system (col. 10, lines 16-31).

6. Gelman did not teach communicating with a first remote computer system and a second remoter computer system. "Official Notice" is taken for the concept of a gateway communicating on behalf of a virtual computer system with multiple remote computer system is known and accepted in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to detailing a gateway in communication with multiple remote computer system because by doing so would increase the efficiency of Gelman's system by allowing a gateway to manage multiple communication sessions between virtual computer systems and multiple remote computer systems rather than a gateway for each communication session.

7. As per claims 6 and 16, Gelman taught the invention as claimed in claims 1 and 12 above. Gelman further taught wherein the unique network address for each of the virtual, remote and host computer systems is an Internet Protocol address (fig. 14).

8. As per claims 7 and 17, Gelman taught the invention as claimed in claims 1 and 12 above. Gelman did not specifically detailing the unique network address is a domain name. "Official Notice" is taken for the concept of computer systems with a Domain Name System domain name is known and accepted in the art. It would have been obvious to one having

ordinary skill in the art at the time of the invention was made to include a domain name because by doing so would allowed a user to associate a computer system with a domain name instead of complicated IP address.

9. As per claim 11, Gelman taught the invention as claimed in claim 1 above. Gelman further taught wherein the query for the source network address for the first communication socket is made by an operating system of the host computer system (col. 5, lines 38-48).

10. As per claim 18, Gelman taught the invention as claimed in claim 12 above. Gelman further taught wherein the virtual network addresses are hosted by the computing device as a service to customers (col. 5, lines 5-8).

11. As per claim 21, Gelman taught the invention as claimed in claim 12 above. Gelman further taught wherein the sending of information to a remote computing device using a created communication socket includes:

making a connection request to the remote computing device over the created communication socket, the connection request including an indication of the virtual network address (col. 26, lines 46-65; col. 28, lines 64-col. 29, lines 15); and

receiving an indication from the remote computing device that the connection is accepted (col. 29, lines 67-col. 30, lines 7).

12. As per claim 25-26 and 28, Gelman did not specifically detailing the type of computer-readable medium. "Official Notice" is taken for the concept of computer-readable medium such as memory or data transmission medium is known and accepted in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include different types of computer-readable medium because by doing so would increase the field of use in their systems.

13. Claims 2-3, 22, 31 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman in view Raychaudhuri, U.S. Patent 4,745,599 (hereinafter Raychaudhuri)

14. As per claims 2-3, 22, 31 and 37, Gelman taught the invention substantially as claimed in claims 1, 12, 30 and 36 above. Gelman did not teach adding information to the received message. Raychaudhuri taught

adding information to the received message indicating that the message was received from the virtual computer system (col. 4, lines 20-26).

15. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Gelman and Raychaudhuri because Raychaudhuri's method of adding information to the received message would increase the user alertness of Gelman's system by allowing the user to view the sender that is added to the received message.

16. Claims 4-5, 8, 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman in view of Applicant Admission of Prior Art [AAPA].

17. As per claims 4, 15 and 23, Gelman taught the invention as claimed in claims 1 and 12 above. Gelman did not teach the sent messages are emails. AAPA taught wherein the sent messages are emails (Specification, page 1, lines 1-3).

18. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Gelman and AAPA because AAPA would increase the field of use in Gelman's system by allowing emails to be used with the system.

19. As per claim 5, Gelman and AAPA taught the invention as claimed in claim 4 above. AAPA further taught wherein the sending of the emails is performed by an executing copy of Sendmail (Specification, page 3, 10-19).

20. As per claim 8, Gelman taught the invention as claimed in claim 1 above. Gelman did not teach sharing memory of the host computer system. AAPA taught wherein the hosted virtual computer systems share memory, storage and processing of the host computer system.

21. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Gelman and AAPA because AAPA would

increase the efficiency of Gelman's system by allowing a host computer system to be use by multiple virtual computer systems.

22. Claims 9, 19 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman in view of Sandelman et al, U.S. Patent 6,717,513 (hereinafter Sandelman).

23. As per claims 9, 19 and 38, Gelman taught the invention as claimed in claims 1, 12 and 36 above. Gelman did not teach remoter user accessing the virtual computer system. Sandelman taught wherein the determining that a message is to be sent from a virtual computer system to the second remote computer system includes:

receiving an indication from a remote user to access resources of the virtual computer system (col. 17, lines 44-51);

after determining that the remote user is a defined user of the virtual computer system, providing access to the resources (col. 11, lines 19-24; col. 5, lines 67-col. 6, lines 2);

receiving an indication from the remote user to create a message having a recipient that is a user of the second remote computer system (col. 17, lines 44-61); and

creating the message from the defined user of the virtual computer system with the user of the second remote computer system as a recipient, and wherein the message sent to the second remote computer system from the host computer system on behalf of the virtual computer system is the created message (col. 17, lines 44-61).

24. Sandelman did not teach a recipient is a user of the remote computer system. "Official Notice" is taken for the concept of sending message to a user of the remote computer system is known and accepted in the art. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include a recipient that is a user of the remote computer system because by doing so would allow emails to be send to a remote recipient.

25. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman in view of et al, U.S. Patent 6,658,454 (hereinafter Delany).

26. As per claim 32, Gelman taught the invention as claimed in claim 30 above. Gelman and Sandelman did not storing messages in a queue. Delany taught after the creating of the message and before the sending of the message, storing the created message temporarily in a queue of outgoing messages for the virtual computer system (col. 2, lines 1-13).

27. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Gelman and Delany because Delany's method of temporarily queuing outgoing message would increase the efficiency of Gelman's system by allowing outgoing message to be temporarily queue during high network traffic.

28. Claims 13 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman in view of et al, U.S. Patent 5,889,954 (hereinafter Gessel).

29. As per claims 13 and 33, Gelman taught the invention as claimed in claims 12 and 30 above. Gelman did not teach without binding a network address to the socket. Gessel taught without binding a virtual network address to the first communication socket, sending information to the first remote computing device using the first communication socket such that the sent information includes the assigned network address (col. 4, lines 46-57).

30. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Gelman and Gessel because Gessel's method of without binding a network address would increase the system flexibility of Gelman's system by allowing unbind network computer to use the communication socket.

31. Claims 10, 20 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman and Sandelman in view of Delany.

32. As per claims 10, 20 and 39, Gelman and Sandelman taught the invention as claimed in claims 9, 19 and 38 above. Gelman and Sandelman did not storing messages in a queue. Delany taught after the creating of the message and before the sending of the message, storing the created message temporarily in a queue of outgoing messages for the virtual computer system (col. 2, lines 1-13).

33. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Gelman, Sandelman and Delany because

Delany's method of temporarily queuing outgoing message would increase the efficiency of Gelman's and Sandelman's system by allowing outgoing message to be temporarily queue during high network traffic.

34. As per claim 14, Gelman and Gessel taught the invention substantially as claimed in claim 13 above. Gelman and Gessel did not teach adding information to the received message. Raychaudhuri taught

adding information to the received message indicating that the message was received from the virtual computer system (col. 4, lines 20-26).

35. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Gelman, Gessel and Raychaudhuri because Raychaudhuri's method of adding information to the received message would increase the user alertness of Gelman's and Gessel's systems by allowing the user to view the sender that is added to the received message.

CONCLUSION

36. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (703)305-7721. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday.

38. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

39. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)350-6121.

P.L.

JOHN FOLLANSBEE
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TECHNOLOGY CENTER 2100